

WHAT IS CLAIMED IS:

1. A power-supply circuit for an in-body information acquiring apparatus, the in-body information acquiring apparatus having a function executing unit that realizes a predetermined function inside a
5 body of a patient, comprising:
a power unit that includes a cell and that outputs a first current and a first voltage; and
a converter that converts the first current to a second current, which is a current required to operate the function executing unit for a
10 predetermined time, and converts the first voltage to a second voltage, which is a voltage required to operate the function executing unit.
2. The power-supply circuit according to claim 1, wherein the power unit includes a plurality of cells, and the cells are electrically
15 connected to each other so as to output the first current and the first voltage.
3. The power-supply circuit according to claim 2, wherein the cells
20 are connected in parallel.
4. The power-supply circuit according to claim 3, wherein the converter is a step-up converter that steps-up the first voltage to the second voltage.

5. The power-supply circuit according to claim 4, wherein the step-up converter is a step-up switching regulator circuit.
6. The power-supply circuit according to claim 4, wherein the
5 step-up converter is a charge pump.
7. The power-supply circuit according to claim 2, wherein the cells are connected in series.
- 10 8. The power-supply circuit according to claim 7, wherein the converter is a step-down converter that steps-down the first voltage to the second voltage.
9. The power-supply circuit according to claim 8, wherein the
15 step-down converter is a step-down switching regulator circuit.
10. The power-supply circuit according to claim 8, wherein the step-up converter is a linear regulator.
- 20 11. The power-supply circuit according to claim 1, wherein the cell is a silver-oxide button cell.
12. The power-supply circuit according to claim 1, wherein the cell is a SR726SW cell.

13. A power-supply circuit for an in-body information acquiring apparatus, the in-body information acquiring apparatus having a function executing unit that realizes a predetermined function inside a body of a patient, comprising:

5 a power unit that includes

a first power unit that includes a cell that outputs a first current and a first voltage; and

a second power unit that includes a cell and that outputs a second current and a second voltage; and

10 a switch that selectively connects any one of the first power unit and the second power unit to the function executing unit for a predetermined period so as to convert the first current or the second current to a third current, which is a current required to operate the function executing unit predetermined time, and converts the first
15 voltage or the second voltage to a third voltage, which is a voltage required to operate the function executing unit.

14. The power-supply circuit according to claim 13, wherein

20 the first power unit includes a plurality of cells, and the cells are connected in series to each other so as to output the first current and the first voltage; and

the second power unit includes a plurality of cells, and the cells are connected in series to each other so as to output the second current and the second voltage.

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15. The power-supply circuit according to claim 13, wherein the cell is a silver-oxide button cell.

16. The power-supply circuit according to claim 13, wherein the cell
5 is a SR726SW cell.

17. An in-body information acquiring apparatus comprising:
a function executing unit that realizes a predetermined function inside a body of a patient;

10 a power unit that includes a cell and that outputs a first current and a first voltage; and

a converter that converts the first current to a second current, which is a current required to operate the function executing unit for a predetermined time, and converts the first voltage to a second voltage,
15 which is a voltage required to operate the function executing unit.

18. The in-body information acquiring apparatus according to claim 17, wherein the function executing unit includes

a sensor that collects information from the inside the body of the
20 patient; and

a communication unit that transmits the information to outside by using wireless communications.

19. The in-body information acquiring apparatus according to claim 18, wherein the sensor is an imaging unit that collects image signal corresponding to an image inside the body of the patient.

5 20. An in-body information acquiring apparatus comprising:
a function executing unit that realizes a predetermined function inside a body of a patient;
a power unit that includes
a first power unit that includes a cell that outputs a first
10 current and a first voltage; and
a second power unit that includes a cell and that outputs a second current and a second voltage; and
a switch that selectively connects any one of the first power unit and the second power unit to the function executing unit for a
15 predetermined period so as to convert the first current or the second current to a third current, which is a current required to operate the function executing unit predetermined time, and converts the first voltage or the second voltage to a third voltage, which is a voltage required to operate the function executing unit.

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21. The in-body information acquiring apparatus according to claim 20, wherein the function executing unit includes

a sensor that collects information from the inside the body of the patient; and

25 a communication unit that transmits the information to outside

by using wireless communications.

22. The in-body information acquiring apparatus according to claim
21, wherein the sensor is an imaging unit that collects image signal
5 corresponding to an image inside the body of the patient.